

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/540,162  
Applicant: Andreas Schuetze et al.  
Filed: December 23, 2005  
Title: "VACUUM ARC SOURCE WITH DEVICE FOR GENERATING A MAGNETIC FIELD"  
  
tc/a.u. : 1753  
Conf. No. : 3597  
  
Cust. No. : 00116  
Docket No. : 38300

THIRD LETTER REQUESTING CORRECTED FILING RECEIPT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

This is the third request for a corrected filing receipt. Enclosed is a copy of the Filing Receipt (with correction written in) for the above-identified patent application, dated April 25, 2006. The receipt contains an error in the "Title" section of the receipt. The title should read the same as the title on the corresponding PCT application. A copy of the cover page of the PCT application is enclosed.

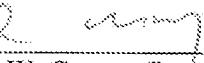
The title should read "VACUUM ARC SOURCE WITH DEVICE FOR GENERATING A MAGNETIC FIELD"

Also enclosed is a copy of our two previous requests dated May 3, 2006 and October 9, 2006.

Please issue a corrected filing receipt for this application and forward the same to the undersigned attorney of record.

If there are any further fees resulting from this communication not covered by the enclosed check,  
or if no check was enclosed, please charge the same to Deposit Account No. 16-0820, Order No.38300.

Respectfully submitted,  
PEARNE & GORDON LLP

By   
Michael W. Garvey, Reg. No. 35878

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Suite 1200  
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September 17, 2007

(12) NACH DEM VERTRAG ÜBER DIE INTERNATIONALE ZUSAMMENARBEIT AUF DEM GEBIET DES  
PATENTWESENS (PCT) VERÖFFENTLICHTE INTERNATIONALE ANMELDUNG

(19) Weltorganisation für geistiges Eigentum  
internationales Büro



(43) Internationales Veröffentlichungsdatum  
8. Juli 2004 (08.07.2004)

PCT

(10) Internationale Veröffentlichungsnummer  
**WO 2004/057642 A2**

(51) Internationale Patentklassifikation?: **H01J 37/32**

[DE/AT]; Churerstrasse 10, A-6800 Feldkirch (AT).  
**WOHLRAB, Christian** [AT/AT]; Weinberggasse 31a,  
A-6800 Feldkirch (AT).

(21) Internationales Aktenzeichen: **PCT/CH2003/000710**

(74) Gemeinsamer Vertreter: **UNAXIS BALZERS AG**,  
Patentabteilung, FL-9496 Balzers (LI).

(22) Internationales Anmeldedatum:  
30. Oktober 2003 (30.10.2003)

(81) Bestimmungsstaaten (*national*): AB, AG, AL, AM, AT,  
AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR,  
CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GH,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU,  
SD, SE, SG, SK, SI, TI, TM, TN, TR, TT, TZ, UA, UG,  
US, UZ, VN, YU, ZA, ZM, ZW.

(25) Einreichungssprache: **Deutsch**

(84) Bestimmungsstaaten (*regional*): ARIPO-Patent (BW,

(26) Veröffentlichungssprache: **Deutsch**

GH, GM, KE, LS, MW, MZ, SD, SI, SZ, TZ, UG, ZM,

(30) Angaben zur Priorität:  
2163/02 19. Dezember 2002 (19.12.2002) CH

*[Fortsetzung auf der nächsten Seite]*

(71) Anmelder (*für alle Bestimmungsstaaten mit Ausnahme von US*): **UNAXIS BALZERS AKTIENGESELLSCHAFT**

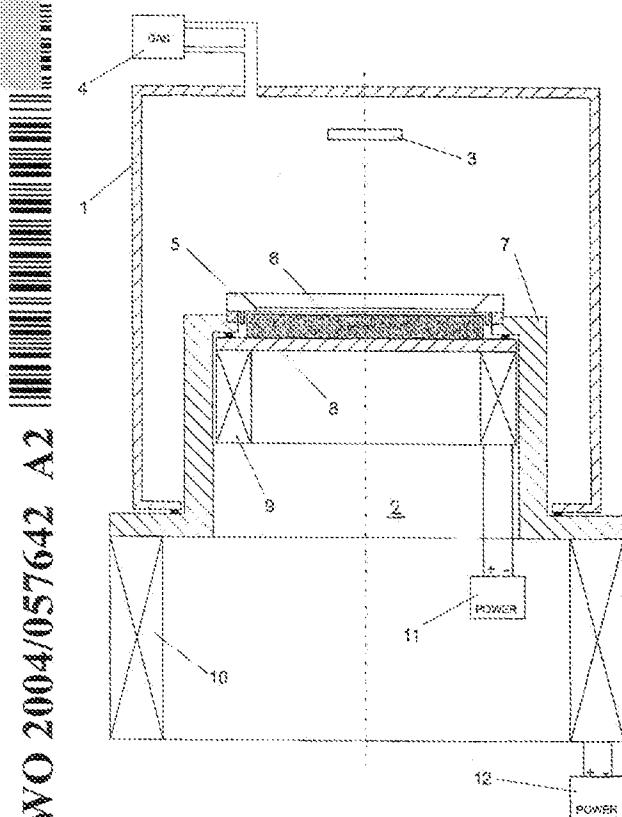
[LI/LI]; FL-9496 Balzers (LI).

(72) Erfinder; und

(75) Erfinder/Anmelder (*nur für US*): **SCHÜTZE, Andreas**

(54) Titel: VACUUM ARC SOURCE COMPRISING A DEVICE FOR GENERATING A MAGNETIC FIELD

(54) Bezeichnung: VACUUMARCQUELLE MIT MAGNETFELDERZEUGUNGSEINRICHTUNG



(57) **Abstract:** The invention relates to a vacuum arc source and to a method for operating the same, said source comprising a target with a surface for operating an arc discharge. The target is arranged in the range of influence of a device for generating a magnetic field, said device comprising at least two magnetic systems of opposite polarity and being embodied in such a way that the component  $B_1$ , which is perpendicular to the surface and pertains to the resulting magnetic field has essentially constantly low values over a large part of the surface or has a value equal to zero.

(57) **Zusammenfassung:** Offenbart wird eine Vakuumarquelle sowie ein Verfahren zu deren Betrieb, umfassend ein Target mit einer Oberfläche zum Betreiben einer Lichtbogenentladung, wobei das Target im Wirkungsbereich einer Magnetfelderzeugungsvorrichtung angeordnet ist, die, zumindest zwei entgegengesetzte gepolte Magnetsysteme umfasst und so ausgebildet ist, dass die senkrecht zur Oberfläche stehende Komponente  $B_1$  des resultierenden Magnetfelds über einen Grossteil der Oberfläche im wesentlichen konstant kleine Werte aufweist oder Null ist.

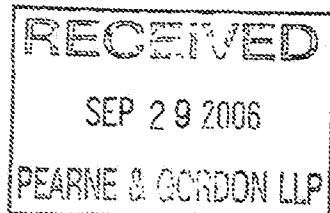


## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
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 Alexandria, Virginia 22313-1450  
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APPL NO.	FILING OR 371 (S) DATE	ART UNIT	FIL FEE RECD	ATTY.DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/540,162	12/23/2005	1753	2040	38300 ✓	16	32	1

116  
 PEARNE & GORDON LLP  
 1801 EAST 9TH STREET  
 SUITE 1200  
 CLEVELAND, OH 44114-3108



CONFIRMATION NO. 3597  
 CORRECTED FILING RECEIPT  
  
 "OC008000020587762"

Date Mailed: 09/26/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Andreas Schuetze, Marina del Rey, CA; ✓  
 Christian Wohlrab, Feldkirch, AUSTRIA; ✓

## Assignment For Published Patent Application

Unaxis Balzers Ltd., Balzers, LIECHTENSTEIN ✓

Power of Attorney: The patent practitioners associated with Customer Number 116.

## Domestic Priority data as claimed by applicant

This application is a 371 of PCT/CH03/00710 10/30/2003 ✓

## Foreign Applications

SWITZERLAND 2163/02 12/19/2002 ✓

If Required, Foreign Filing License Granted: 08/23/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US10/540,162

Projected Publication Date: Not Applicable

Non-Publication Request: No

Early Publication Request: No

Title

*FOR*

VACUUM ARC SOURCE WITH DEVICE FOR GENERATING A  
 MAGNETIC FIELD

Preliminary Class

204

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process simplifies the filing of patent applications on the same invention in member countries, but does not result in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

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Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Rec'd  
PATENT

## THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/540,162  
Applicant: Andreas Schuetze et al.  
Filed: December 23, 2005  
Title: "VACUUM ARC SOURCE WITH DEVICE FOR GENERATING  
A MAGNETIC FIELD"  
  
to/a.u. : 1753  
Conf. No. : 3597  
  
Cust. No. : 00116  
Docket No. : 38300

LETTER REQUESTING CORRECTED FILING RECEIPT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

Enclosed is a copy of the Filing Receipt (with correction written in) for the above-identified patent application, dated April 25, 2006. The receipt contains an error in the "Title" section of the receipt.

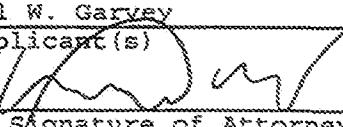
The title should read "VACUUM ARC SOURCE WITH DEVICE FOR GENERATING A MAGNETIC FIELD".

A copy of letter requesting this correction dated May 3, 2006 is enclosed.

Please issue a corrected filing receipt for this application and forward the same to the undersigned attorney of record.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Office of Initial Patent Examination, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Michael W. Garvey  
Name of Attorney for Applicant(s)  
10-09-2006  
Date  
Signature of Attorney



If there are any further fees resulting from this communication not covered by the enclosed check, or if no check was enclosed, please charge the same to Deposit Account No. 16-0820, Order No.38300.

Respectfully submitted,  
PEARNE & GORDON LLP  
By \_\_\_\_\_  
Michael W. Garvey, Reg. No. 35878

1801 East 9th Street  
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October 9, 2006



1753  
J.P.  
PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/540,162  
Applicant: Andreas Schuetze et al.  
Filed: December 23, 2005  
Title: "VACUUM ARC SOURCE WITH DEVICE FOR PRODUCING A MAGNETIC FIELD"  
  
to/a.u. : 1753  
Conf. No. : 3597  
  
Cust. No. : 00116  
Docket No. : 38300

**LETTER REQUESTING CORRECTED FILING RECEIPT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir/Madam:

Enclosed is a copy of the Filing Receipt (with correction written in) for the above-identified patent application, dated April 25, 2006. The receipt contains an error in the "Applicant(s)" section of the receipt and in the title section. The first inventor's information should read as follows:

Andreas Schuetze, Marina del Rey, CA, USA

The title should read "'VACUUM ARC SOURCE WITH DEVICE FOR GENERATING A MAGNETIC FIELD'"

A copy of the Application Data Sheet submitted on December 21, 2005 showing the correct information is also enclosed.

Please issue a corrected filing receipt for this application and forward the same to the undersigned attorney of record.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Office of Initial Patent Examination, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

Michael W. Garvey  
Name of Attorney for Applicant(s)  
05-03-2006  
Date Signature of Attorney

If there are any further fees resulting from this communication not covered by the enclosed check, or if no check was enclosed, please charge the same to Deposit Account No. 16-0820, Order No.38300.

Respectfully submitted,  
PEARNE & GORDON LLP

By \_\_\_\_\_

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May 3, 2006